

# 1. Introduction

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The global economy has experienced one of the most tumultuous periods in recent history during the writing of this book. Global skill shortages which were present in 1998 became more acute as we entered the new millennium. By 2001 the global economy entered a slowdown. The attacks upon New York City and Washington, DC on 11 September 2001 further exacerbated the effects of an already weakened economy, contributing to a rapid increase in lay-offs, an increase in global unemployment rates, a drop in corporate profits, a decline in gross domestic product growth and a further decline in global equity prices. As we go to press, it seems that a good monetary and fiscal policy over the past year has been putting the US economy back on track (Feldstein, 2002).

Throughout history, global economies have risen and fallen. We are confident that as the global economy recovers, skill shortages will once again reappear. Although our research largely covers the period 1995–98, previous research conducted in the United States found skill shortages in some occupations even during the economic downturn in 1991.

We believe the cause of skill shortages, their measurement during 1995–98 and variation across countries will again become relevant as we head into new periods of skill shortages in the twenty-first century.

In recent decades, many macroeconomic changes have occurred in market economies that have had significant microeconomic implications (Siebert and Zaidi, 1996; Erickson, Kimbell and Mitchell, 1997). Variables such as the unemployment rate play a major role in macroeconomic theory (Zaidi, 1991). As the unemployment rate falls the economy approaches full employment. However our research suggests that even at high unemployment rates, skill shortages exist. Skill shortages in certain occupations have been recognized as a problem in times of expansion as well as contraction.

Generally concerns about skill shortages increase when rapid economic growth has been sustained for a number of years. In the initial period of recovery following a downturn, labour demand can be met by slack labour. After the slack labour becomes employed, shortages can emerge as a problem. The economic cycle does not, however, have the same effect on all occupations. Many variables determine whether shortages will actually occur in a given occupation. Shortages do not have to be country-wide in

scope. They can exist in a region of a country, in an industry or even in a sub-specialty of an occupation. These shortages can be bottlenecks to economic growth.

Unfortunately there is no generally agreed upon method for measuring skill shortages. This book explores various aspects of skill shortages, develops a methodology of measuring skill shortages by occupation and applies it to measure shortages using data collected from 19 countries.

Countries from North America, Latin America, Europe and the Pacific region were studied to obtain geographic diversity. The specific countries included were the United States, Canada, Chile, Mexico, Austria, Belgium, Denmark, France, Germany, Greece, Italy, Portugal, Spain, Sweden, the United Kingdom, Australia, Japan, Singapore and the Republic of Korea.

The study was limited to developed and emerging economies where data were more readily available. In order to include a country in our study a consistent time series of either employment or wage data was required. Some countries changed occupational classification systems in the middle of the period of our study and therefore could not be included. In addition, occupational estimates could not be obtained if the country's population was below a certain size. For example, Israel changed its occupational classification in 1997 and has a smaller population and was thereby excluded.

In Chapter 2, a theoretical framework is developed which considers the special factors that make labour markets different from other types of markets. It counters the objection that skill shortages cannot exist any time since increased wages will automatically bring supply and demand into equilibrium. Chapter 3 briefly discusses the forces which drive globalization and make economies interdependent. Chapter 4 summarizes skill shortage studies for the period 1995–98 for the specific countries and regions discussed in this book. Chapter 5 explains and measures the skill shortage indicators for the 19 countries. This is followed by a comparative analysis of the specific and overall factors correlated with skill shortages in Chapter 6. In Chapter 7, we consider how companies have been coping with skill shortages in the short term. Chapter 8 contains our concluding remarks.

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